

## Live 3 Meets Project5

By Craig Anderton

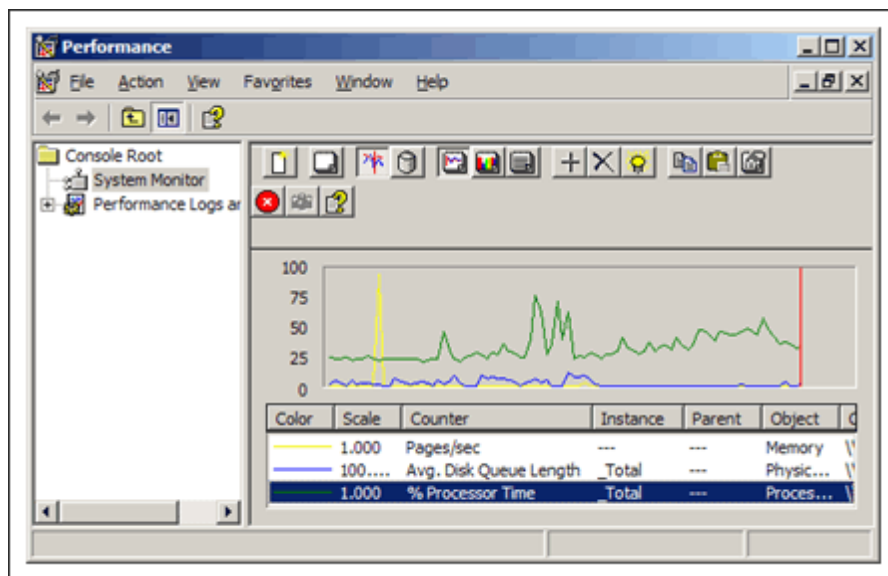
Cakewalk's Project5 is a soft synth-based "virtual studio" program that recalls Propellerhead Software's Reason. Like Reason, it includes a mix of virtual instruments (sampled drum module, analog drum module, polyphonic synthesizer and sampler), along with pattern-based sequencing and a host of signal processors. However, the two programs are actually quite different — Reason is self-contained and has a more comprehensive set of sound generators and manglers, whereas Project5 is more open, as it can accept other instruments and plug-ins. Their sequencing methods are also quite different.

But one major commonality is that both support the ReWire protocol, which allows them to synchronize seamlessly with Live, as well as send audio into Live's mixer. Live offers many features that Project5 does not: linear, "tape-style" recording, several unique processors and, of course, its own amazing way of working with loops in an interactive, real-time way. Meanwhile, Project5 brings its battery of sound generators, a wonderful pattern sequencer, no-nonsense MIDI editing and the ability to read "acidized" (time-stretched) files. (Of course, Live does time-stretching too, but not following the protocol set by Acid. There can be subtle playback differences between an acidized file read by Project5 and the same file warped via Live's stretching technology.)

### Reality Check: Can your Computer REWIRE?

A misconception is that ReWire uses up mondo CPU power. ReWire itself consumes very little, but running two CPU-intensive, audio-related programs can stress out computers with slower processors or insufficient RAM.

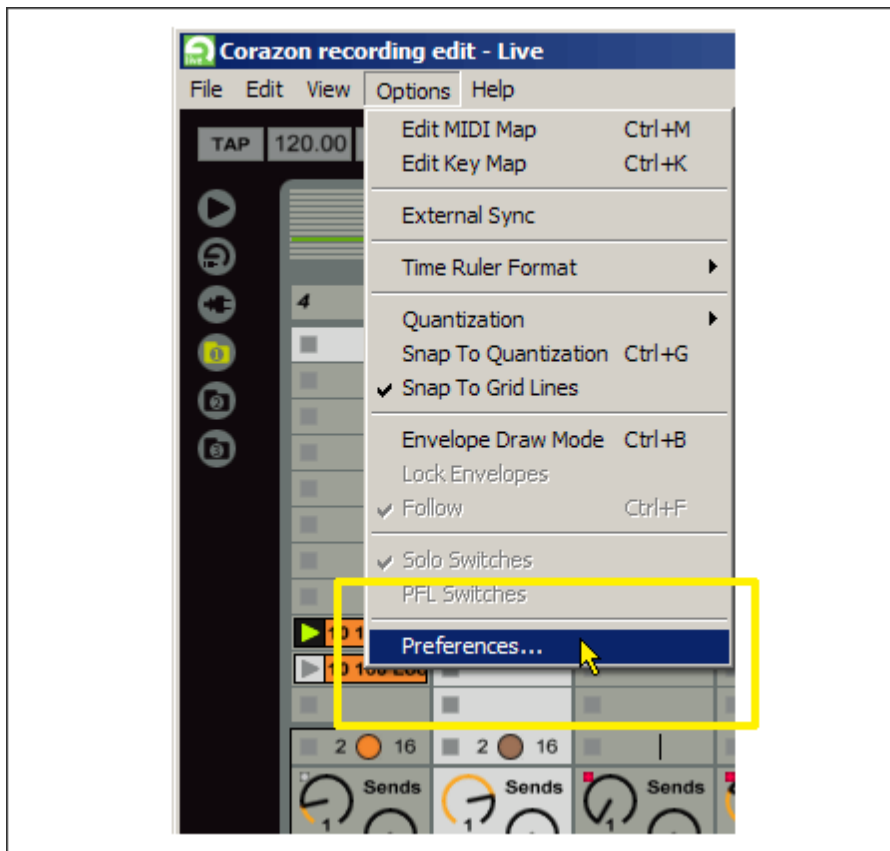
To see how much a program loads down your CPU in Windows XP, go to *Programs > Administrative Tools > Performance*. With "View Current Activity" selected and "% Processor Time" included as a counter (this is a default), the green line shows CPU load.



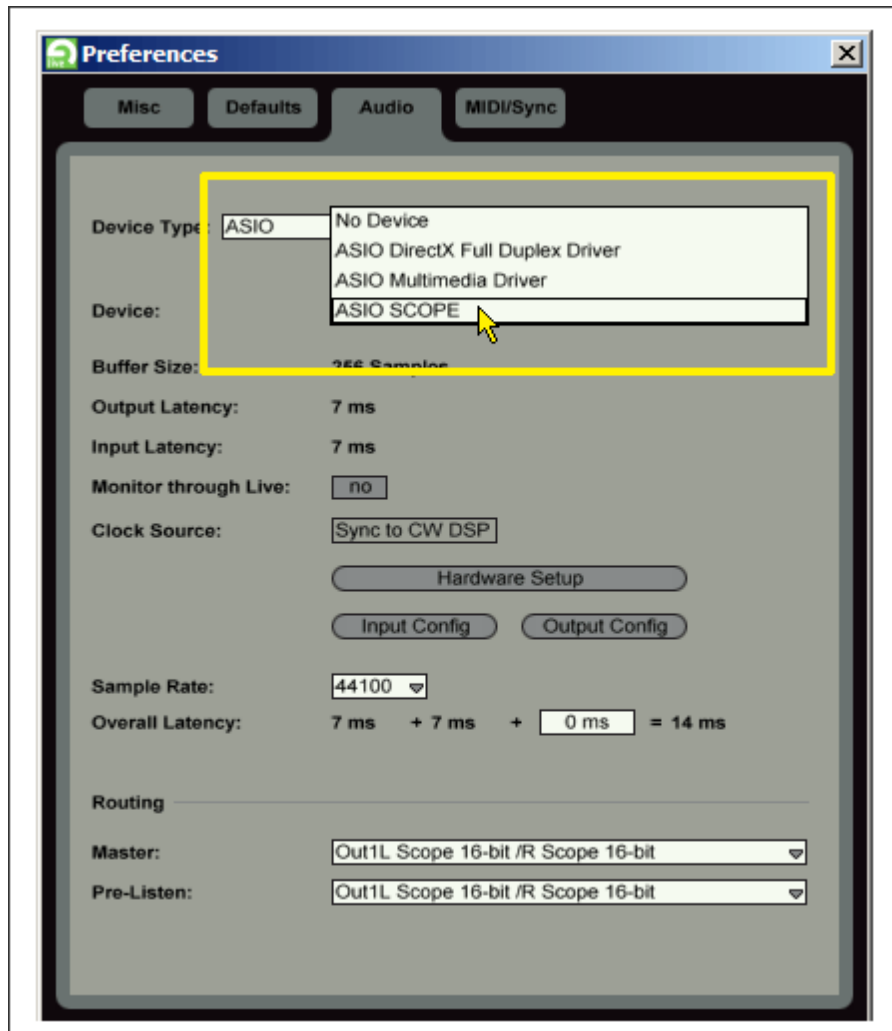
Live is extremely efficient, whereas Project5's load depends on how many soft synths are running. As long as the green line doesn't hit the ceiling, both programs should run just fine.

### Let's Do it!

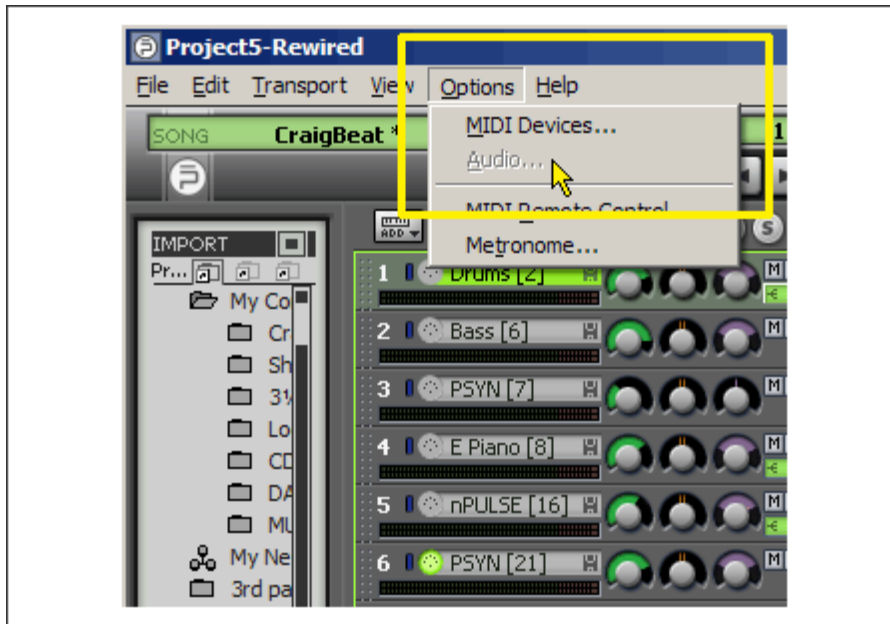
Open Live *first*. This is important because Live is the "host" program, and Project5 is the "client." Do not start playing or editing anything in Live yet, but go *Options > Preferences* to choose the proper audio driver.



Make sure the ASIO driver written for your audio interface is selected. (This example shows that Live is using the ASIO driver for Creamware's Scope system.)

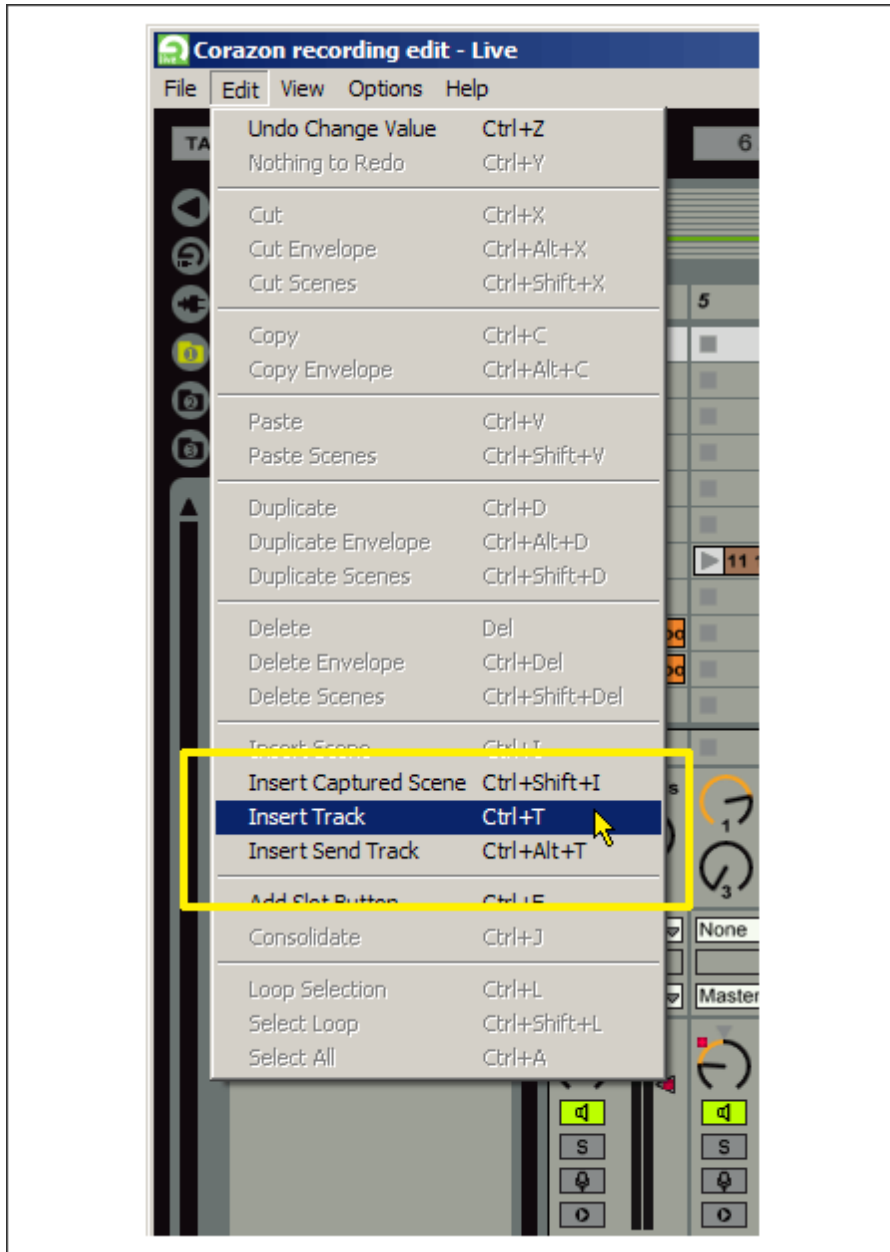


Open Project5. *Don't* edit its audio options (you can't anyway — the menu item will be grayed out), as it will assume those of the host (Live).

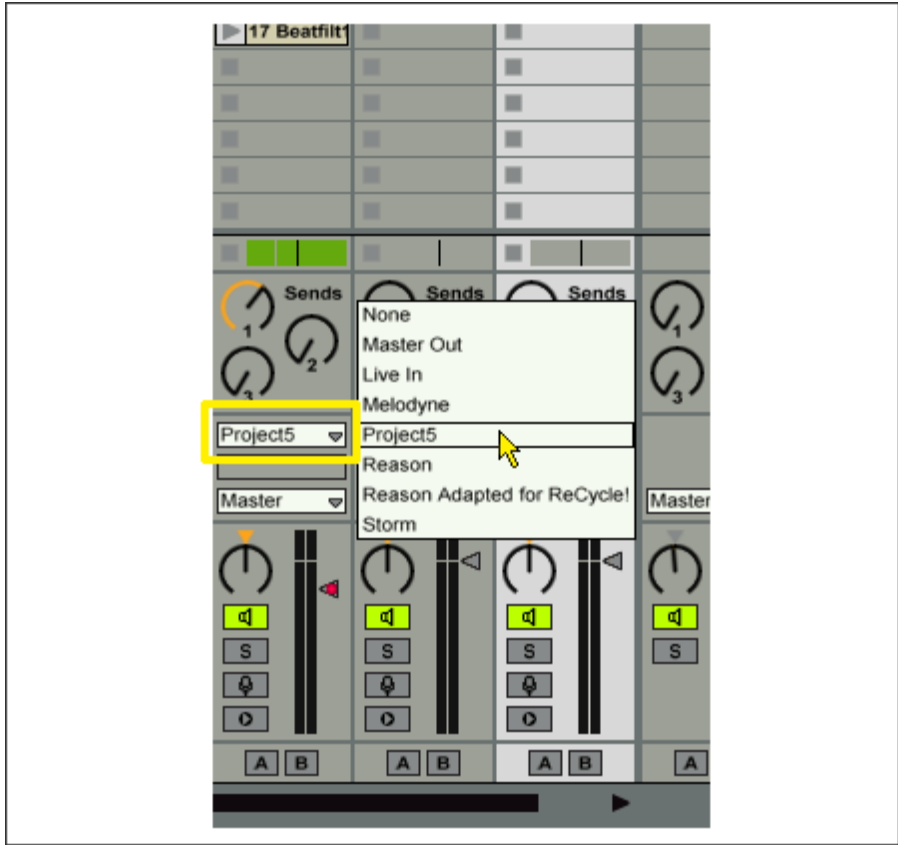


If you have a Project5 file you want to use with Live, open it. Conversely, if you have a file in Live and want to add parts using Project5, load your Live project. Of course, you can also just start with both as "blank slates," or load existing projects into both of them.

Now, let's monitor Project5 within a Live track. If all Live tracks are currently committed to a project, go *Edit > Insert Track*.



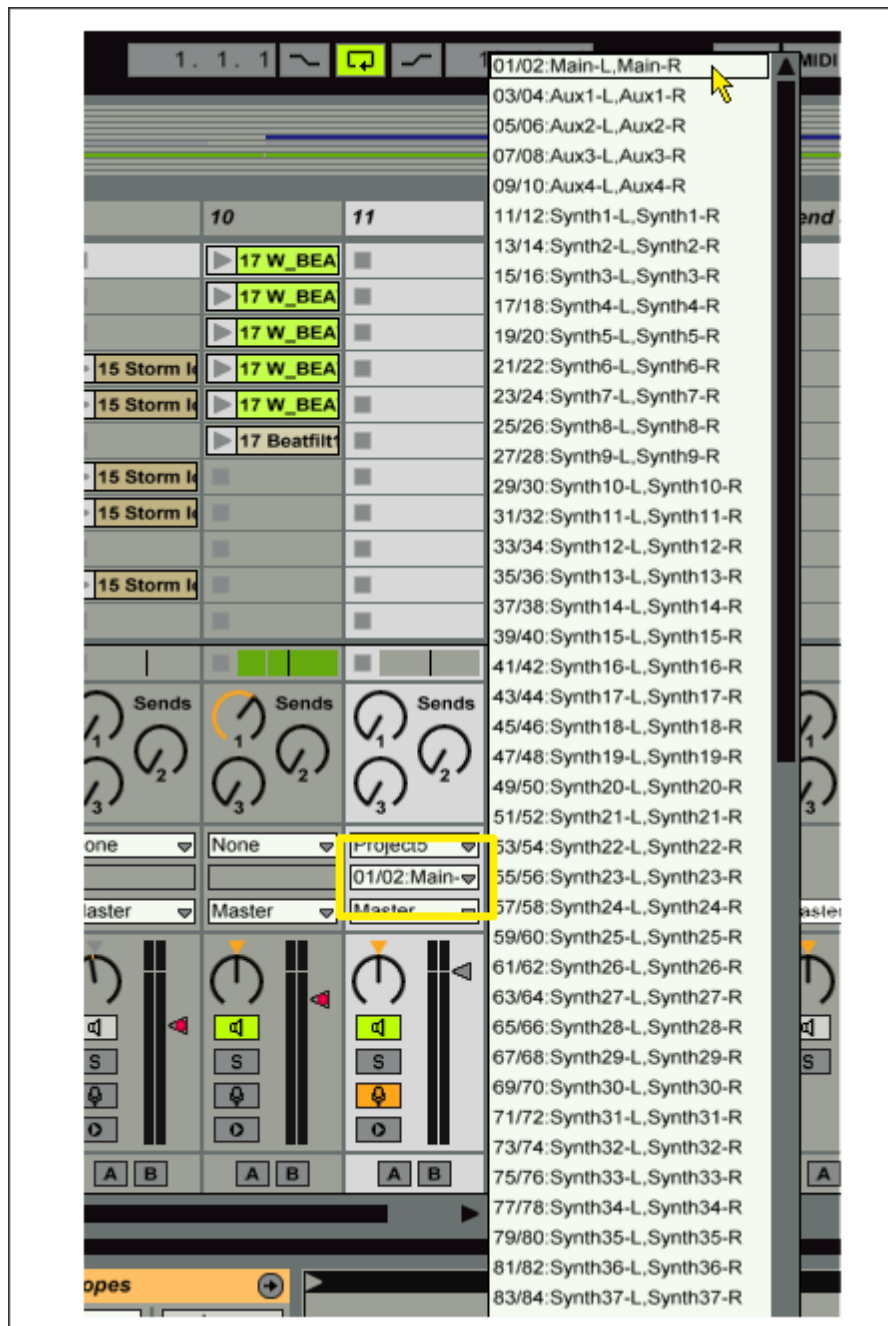
Once you've chosen your track, select "Project5" in the track's Input Type chooser.



Activate Monitoring at the track input.



Select the track's Input Channel chooser, which lists the available Project5 outputs that can patch into the track. Select 01/02 Main-L, Main-R (Project5's main output) for now, although it will likely default to this output anyway. We'll cover the other options, which relate to multiple inputs, later on.



Click on Play in either Live or Project 5, and you'll hear Project5's main output flowing through the selected Live channel. Pretty cool, eh? The screenshot shows Live and Project5 playing happily together.



## MIDI Issues

If you want to control Project5 and Live simultaneously through a single MIDI port, you can't — but you can choose one or the other. So, you can play your sound generators and program parts in Project5 via MIDI; then, when it's time to mix or do real-time loop manipulation in Live, control it from your MIDI keyboard or other control surface. (Note that some of the more sophisticated interfaces with multiple MIDI ports and "MIDI patch bays" may be able to direct MIDI data to both applications simultaneously. Consult the interface's documentation for details.)

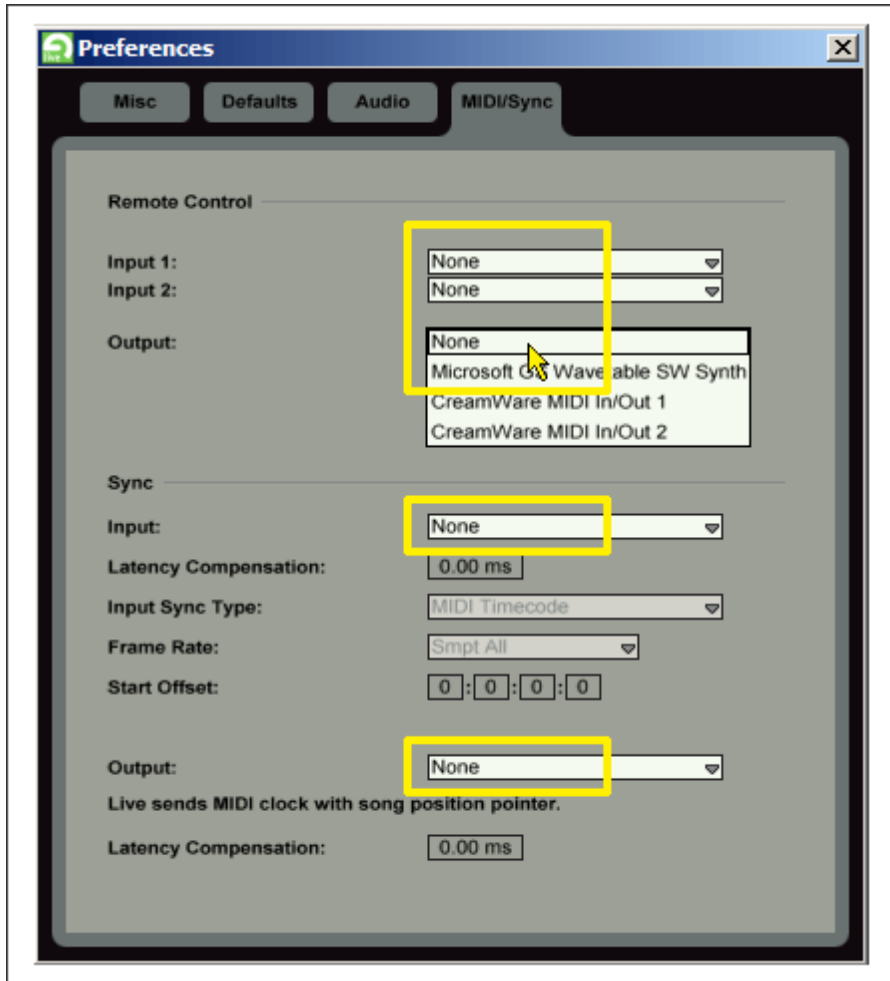


To control Project5 via MIDI:

In Live, go *Options > Preferences*.



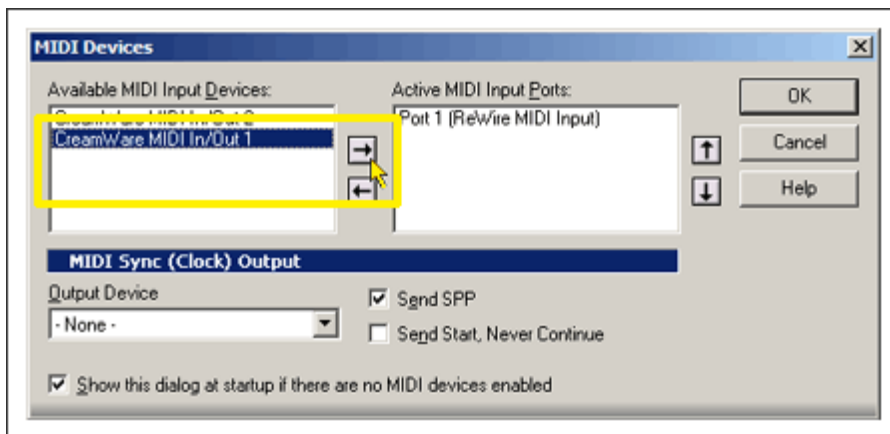
Click on the MIDI/Sync tab, and select "none" in all available choosers.



In Project5, go *Options > MIDI Devices*.



"ReWire MIDI Input" will be shown under "Active MIDI Input Ports." Under "Available MIDI Input Devices," click on the physical MIDI port you want to use, and then click on the right arrow to place this under "Active MIDI Input Ports."



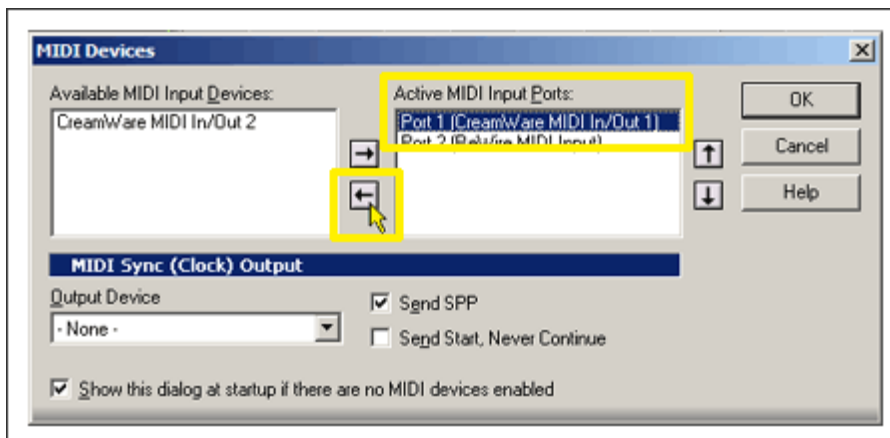
Click on the MIDI devices *OK* button (MIDI control will not be enabled until you do).

To control Live via MIDI instead of Project5:

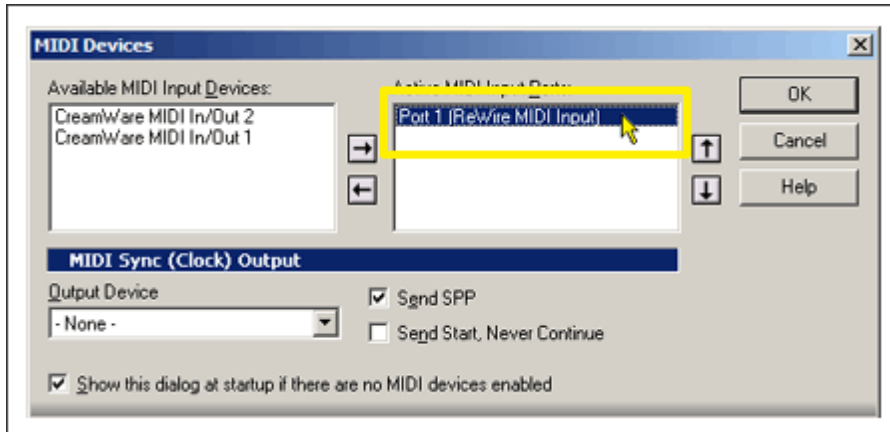
In Project5, go *Options > MIDI Devices*.



Send any active MIDI Input Ports except for "ReWire MIDI Input" to the "Available MIDI Input Devices" field by highlighting the input port, and then clicking on the left arrow. If Output Device is set to anything, set it to "None."



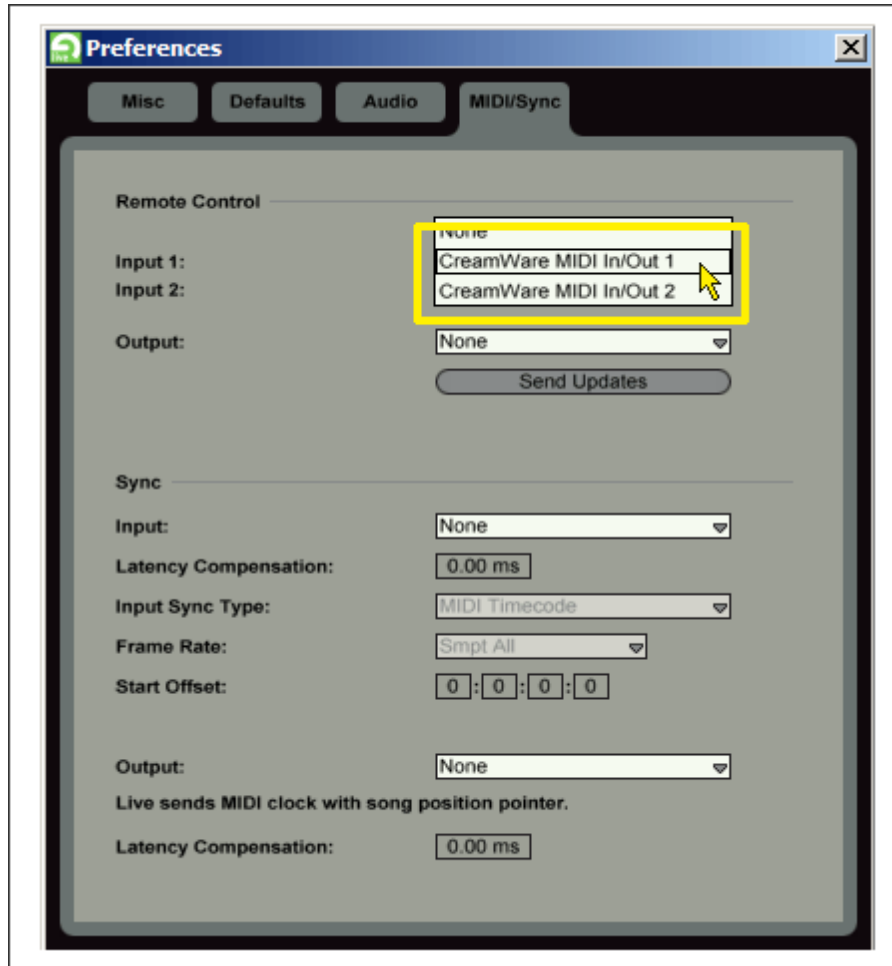
Click on the "ReWire MIDI Input" entry to highlight it so that this is the only valid MIDI input port. Then click on "OK."



In Live, go *Options > Preferences*.



Click on the MIDI/Sync tab, select the desired MIDI Input from the Input 1 chooser, and then close the Preferences box.



Live will now receive MIDI input on Input 1.

### Using Project 5's multiple Output Instruments

A Live track that's connected to Project5 lists a seemingly huge number of possibilities under the Input Channel chooser. That's because each Project5 instrument can have its own output, as can the individual outputs of instruments with multiple outputs. Furthermore, Project5's aux buses can also have individual outputs; overall, you can choose from 64 stereo output pairs or 128 mono outs.

So, how do you know which synth shows up at which output? Easy. In ReWire mode, a number appears next to each instrument name. For example, in the following, Drums is 1, Bass 6, PSYN 7, Epiano 8 and nPULSE is 16.



To assign only the Bass output to a particular track, you'd choose Synth 6-L, Synth 6-R from the Input Channel chooser rather than Main, Aux, some other synth, etc. For PSYN, which is numbered 7, you'd choose Synth 7-L, Synth 7-R. (Note that these are stereo instruments; although you can also choose each output as two mono tracks, given that Live handles stereo tracks, you might as well choose a stereo track.)

Drums are labeled 1, but the Velocity drum module providing these sounds has a main output and four stereo individual outs (5 stereo pairs total). These are added to the base number. For example:

- Velocity Drums Main Outs = Synth 1-L, Synth 1-R
- Velocity Drums Out 1 = Synth 2-L, Synth 2-R
- Velocity Drums Out 2 = Synth 3-L, Synth 3-R
- Velocity Drums Out 3 = Synth 4-L, Synth 4-R
- Velocity Drums Out 4 = Synth 5-L, Synth 5-R

Which brings us to our next instrument, Bass, which is numbered 6. It doesn't have multiple outputs, so the next instrument (PSYN) is numbered 7. Epiano is 8, but nPULSE is 16. That's because the Epiano is being played by the DS864 sampler, which has eight individual outs. So, looking at the Input Channel chooser, the Epiano outs would be listed as Synths 8, 9, 10, 11, 12, 13, 14 and 15.

### A few other fine Points...

If you have a lot going on and your computer can't keep up, you can always record Project5's outputs as linear tracks within Live (just as you would record any other input) and then close Project5.

You can use Live's cool effects on the tracks that are carrying Project5 outputs.

When all else fails — MIDI acts up, playback becomes sluggish or the universe is not properly aligned within your computer — quit Project5, then Live, and open them up again (remember, open Live first). That will fix most problems.

For more ReWire tips, check out the "February Tips and Tricks for Ableton Live 3" by Dave Hill Jr. Although he covers using Reason with Live, many of the concepts apply to using any ReWire device in Ableton-land.

## Hey, what about LIVE 4?

You may have heard rumors that Live 4 will be supporting MIDI, with the same kind of innovative thinking that goes into its support of digital audio. Our spies deep within Ableton have confirmed that this is indeed true. So what does that mean for those who want to ReWire Project5 with Live?

The simple answer is: More!

Live 4 will include some instruments of its own, expanding on Project5's palette. It will also handle pattern creation in a somewhat different way than Project5's PSEQ and, of course, Project5 can run DXi instruments and DirectX effects (as well as VST), while Live exists solely in the VST world. So, if you think the two make a powerful combination now, they'll make an even more powerful combination in the future.

*Bio: Musician/author Craig Anderton has played Carnegie Hall, been involved with dozens of major label releases as a musician, producer or engineer, and plays guitar with the Cologne, Germany-based group Rei\$\$dorf Force. He has written several books, including the classic "Home Recording for Musicians," as well as thousands of articles. Craig has also given seminars on technology and the arts in 37 states, 10 countries, and three languages. He is currently working on a follow-up to his "AdrenaLinn Guitars" sample CD, which is part of M-Audio's ProSessions series. For more info or to check out some of his music, surf to [www.craiganderton.com](http://www.craiganderton.com)*